## DEPARTMENT OF ENVIRONMENTAL SERVICES CITY AND COUNTY OF HONOLULU

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MUFI HANNEMANN MAYOR



December 27, 2007

ERIC S. TAKAMURA, Ph.D., P.E.

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IN REPLY REFER TO: DIR 07-050

Mr. Doug Eberhardt U.S. EPA Region 9 Water Division 75 Hawthorne San Francisco, California 94105

Ms. Libby Stoddard Hawaii State Department of Health Clean Water Branch 919 Ala Moana Boulevard, Suite 301 Honolulu, Hawaii 96814

Re: UV Disinfection Facility at Sand Island Wastewater Treatment Plant

Permit HI 0020117

Dear Mr. Eberhardt and Ms. Stoddard:

This letter confirms the completion of permit requirements relating to the Sand Island Wastewater Treatment Plant Disinfection Facility, set forth in Part A.2.g of the above-referenced permit (the "Permit"). In addition, the City and County of Honolulu requests that the EPA and the Hawaii State Department of Health ("DOH") re-evaluate the need for continuous effluent disinfection pursuant to Part J.7 of the Permit.

As was previously indicated in the City's SIWWTP 2006 Fourth Quarter Report and March 1, 2007 Annual Progress Report, the UV Disinfection Facility was completed on December 20, 2006. The one year period of continuous operation commenced on December 21, 2006, and concluded on December 20, 2007. The available data from this one-year period demonstrates that the UV Disinfection Facility adequately disinfects the SIWWTP effluent such that the discharge meets water quality standards. This is acknowledged by the EPA in its Tentative Decision dated December 7, 2007, regarding the City's application for a variance for the SIWWTP under 301(h) of the Clean Water Act.

<sup>&</sup>lt;sup>1</sup> The City notes that the EPA's Tentative Decision denying a variance for the SIWWTP under 301(h) of the Clean Water Act states the pilot testing period began in September 2007. The City wishes to clarify its position that the one-year period of continuous operation commenced on December 21, 2006.

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## Paragraph J.7 of the Permit states:

Following at least one year of continuous operation of the Sand Island Wastewater Treatment Plant Disinfection Facility, at the request of the Permittee, the EPA and DOH will re-evaluate the need for continuous effluent disinfection. To facilitate this process, the EPA and DOH will work with the Permittee and interested parties to evaluate all available information to assess the effects of the Sand Island WWTP discharge on nearshore and shoreline water quality without and with the operation of the Sand Island WWTP Disinfection Facility, where effective effluent disinfection is achieved (as specified in Part A.2.g of this permit).

In accordance with the foregoing paragraph, the City hereby requests that the EPA and DOH re-evaluate the need for continuous disinfection. In particular, the City requests that EPA and DOH consider the following:

- Whether less than continuous disinfection would support the attainment and maintenance of water quality that allows recreational activities in and on the water;
- Revising the Permit's categorical effluent enterococcus limit of 18,000 CFU/100 ml, based on a single grab sample between noon and 3 p.m. The City submits that the effectiveness of UV disinfection is best determined by evaluating its impact on bacteria levels in the receiving waters. In evaluating whether discharge from the SIWWVTP would meet and maintain water quality standards with less than continuous disinfection, the City requests that the regulators consider data from the receiving waters, rather than data taken from the effluent at the same time each day. The City also notes that the sampling method set forth in the Permit is internally inconsistent in that it requires the single grab sample to be reported as a geometric mean. See Permit note 12.<sup>2</sup>

I look forward to hearing from you, so that we can discuss how to proceed with the re-evaluation, and what information and data we can provide. I will be in San Francisco on February 12 and 13, meeting with DOH and another representative of EPA Region 9 on other matters, and I expect Ms. Stoddard will be there as well. I would welcome the opportunity to meet with you while we are all in San Francisco.

<sup>&</sup>lt;sup>2</sup> The City requested a modification to the Permit in 1999, to provide for the reporting of a geometric mean of multiple grab samples taken over the course of the day. However, the EPA did not make a determination regarding this request. See Letter from Alexis Strauss to Timothy Steinberger, dated July 1, 2001, acknowledging the City's request for a permit modification, and stating that the EPA shall respond to the request shortly.

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I would welcome the opportunity to meet with you while we are all in San Francisco, and suggest the morning of February 14 as a possibility. Please let me know if you are willing and available to meet, and we can coordinate our schedules.

Very truly yours,

Eric S. Takamura, Ph.D., P.E.

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Director

EST:hrk

cc: John Kemmerer (via email and regular mail)
Carrie Okinaga, Corporation Counsel (via email)